

Unit 1: Numbers 0-5: Represent, Count and Write

Content Area: **Mathematics**
Course(s): **Math K**
Time Period: **September**
Length: **3 weeks**
Status: **Published**

Unit Summary

In this unit, students will learn to represent, count and write numbers from 0 to 5. They will be able to understand the relationship between numbers and quantities and their arrangement.

Standards

MA.K.CC	Counting and Cardinality
MA.K.CC.A	Know number names and the count sequence. Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.
MA.K.CC.A.1	Count to 100 by ones and by tens.
MA.K.CC.A.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
MA.K.CC.A.3	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
MA.K.CC.B	Count to tell the number of objects.
MA.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MA.K.CC.B.4a	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
MA.K.CC.B.4b	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
MA.K.CC.B.4c	Understand that each successive number name refers to a quantity that is one larger.
MA.K.CC.B.5	Count to answer "how many?" questions about as many as 20 things arranged in a line, a

	rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.A.CS2	Select and use applications effectively and productively.

Student Learning Objectives

Students will be able to...

- count up to 5 objects.
- model 0, 1, 2, 3, 4, and 5 with objects.
- represent 0, 1, 2, 3, 4, and 5 with number names and written numerals.
- use objects or drawings to decompose 5 into pairs in more than one way.

Essential Questions

- How can you show and count up to 5 objects?
- How can you count and write numerals 0-5 with words and numbers?

Enduring Understandings

Students will understand that...

- numerals represent numbers and have many uses.
- number names describe the number of objects.

Application

Students will be able to independently use their learning to...

- write the numerals 0-5.
- count a group of up to 5 objects.
- decompose 5 into pairs in more than one way.

Skills

Students will be skilled at...

- representing, counting and writing numbers to 5.